



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

TECH CENTER 1600/2900

JUN 05 2001

RECEIVED

In re Application of:

Donald R. Owen

Serial No.: 09/820,053

Filed: March 28, 2001

For: SHORT BIOACTIVE PEPTIDES

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§  
§  
§  
§  
§  
§

Group Art Unit: 1646

Examiner: Not assigned

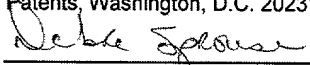
Att'y Docket: 068370.0104

Client Docket: HELX:027

STATEMENT AS REQUIRED UNDER 37 C.F.R. § 1.821(f)

Commissioner for Patents  
Washington, D.C. 20231

Sir:

CERTIFICATE OF MAILING 37 C.F.R. 1.8	
I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on the date below:	
May 23, 2001	 Signature

This submission is in response to the Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures dated April 27, 2001. Submitted herewith are a paper and computer readable form of the sequence listing of those sequences in the captioned patent application.

The computer readable form of the sequence listing is the same as the paper copy of the sequence listing. The sequence information provided in the Specification is also the same as the sequence listing of the enclosed computer readable and paper forms of the sequence listing.

Please enter the enclosed sequence listing in place of the originally filed sequence listing. The submitted sequence listing does not introduce new matter into the patent application.

Respectfully submitted,



Christopher J. Buntel, Ph.D.

Reg. No. 44,573

Customer No. 23640

AGENT FOR ASSIGNEE,

HELIX BIOMEDIX, INC.

Baker Botts L.L.P.  
One Shell Plaza  
910 Louisiana  
Houston, TX 77002-4995  
(713) 229-1992

May 23, 2001

09820053-052901  
T06250" E5002360



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JUN 05 2001

TECH CENTER 1600/2900

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<170> PatentIn Ver. 2.1

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Female	50.0%
Education (years)	12.0 ± 2.0
Occupation	
Professional	30.0%
Managerial	20.0%
Technical	10.0%
Service	20.0%
Unemployed	20.0%
Marital status	
Married	70.0%
Single	10.0%
Divorced	10.0%
Widowed	10.0%
Health status	
Good	80.0%
Fair	10.0%
Poor	10.0%
Smoking status	
Smoker	30.0%
Non-smoker	70.0%
Alcohol consumption	
Regular	10.0%
Occasional	20.0%
Never	70.0%
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Leu Ala Leu

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Resolution	0.5	nm
Slit width	1.0	mm
Detector	Photodiode array	
Sample volume	10	µL
Injection volume	1	µL
Mobile phase	Water / Acetic acid	
Mobile phase flow rate	1.0	L/min
Mobile phase composition	99.9 / 0.1	%
Column	Agilent Zorbax SB-C18	
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Column ID	4.6	mm
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Injection flow rate	1.0	L/min
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Lys Lys Leu Ala Lys Lys Leu  
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Lys Lys Leu Ala Lys Lys Leu  
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<220>
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<222> (13)
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<400> 60  
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1 5 10

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<211> 13
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<220>  
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<222> (13)  
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<400> 61  
Phe Ala Lys Leu Leu Ala Lys Leu Ala Lys Ala Lys Ala  
1 5 10

<210> 62  
<211> 13  
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<400> 62  
Phe Ala Lys Leu Leu Ala Lys Leu Ala Lys Ala Lys Gly  
1 5 10

<210> 63  
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<222> (31)  
<223> AMIDATION

<400> 63  
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1 5 10 15

Ala Lys Leu Ala Leu Ala Leu Lys Ala Leu Ala Leu Lys Ala Leu  
20 25 30

<210> 64  
<211> 23  
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<220>  
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<400> 64  
Phe Ala Lys Lys Leu Ala Lys Lys Leu Lys Lys Leu Ala Lys Lys Leu

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15

Ile Gly Ala Val Leu Lys Val  
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<210> 65

<211> 13

<212> PRT

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<220>

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<222> (13)

<223> AMIDATION

<400> 65

Phe Ala Lys Leu Leu Ala Lys Ala Leu Lys Leu Lys Leu  
1 5 10

<210> 66

<211> 13

<212> PRT

<213> ARTIFICIAL SEQUENCE

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<223> SYNTHETIC SEQUENCE

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<222> (13)

<223> AMIDATION

<400> 66

Phe Ala Lys Leu Leu Ala Lys Ala Leu Lys Lys Ala Leu  
1 5 10

<210> 67

<211> 12

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<222> (12)

<223> AMIDATION

<400> 67

Phe Ala Lys Leu Leu Ala Lys Ala Leu Lys Lys Leu

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<400> 68  
Lys Trp Lys Leu Phe Lys Lys Ala Leu Lys Lys Leu Lys Lys Ala Leu  
1 5 10 15

Lys Lys Ala Leu  
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<223> AMIDATION
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<400> 69  
Lys Ile Ala Lys Val Ala Leu Ala Lys Leu Gly Ile Gly Ala Val Leu  
1 5 10 15

Lys Val Leu Thr Thr Gly Leu  
20

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<220>
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<223> AMIDATION
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1 5 10

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<220>  
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<222> (19)  
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<400> 71  
Met Pro Lys Glu Lys Val Phe Leu Lys Ile Glu Lys Met Gly Arg Asn  
1 5 10 15

Ile Arg Asn

<210> 72  
<211> 26  
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<222> (26)  
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<400> 72  
Gly Ile Gly Ala Val Leu Lys Val Leu Thr Thr Gly Leu Pro Ala Leu  
1 5 10 15

Ile Ser Trp Ile Lys Arg Lys Arg Gln Gln  
20 25

<210> 73  
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<400> 73

Phe Ala Lys Lys Leu Ala Lys Leu Ala Lys Lys Leu Ala Lys Ala Leu  
1 5 10 15

<210> 74  
<211> 12  
<212> PRT  
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<400> 74

Phe Ala Lys Lys Leu Leu Ala Lys Ala Leu Lys Leu  
1 5 10

<210> 75  
<211> 13  
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<220>  
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<220>  
<221> MOD\_RES  
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<223> AMIDATION

<400> 75

Phe Ala Lys Phe Leu Ala Lys Phe Leu Lys Lys Ala Leu  
1 5 10

<210> 76  
<211> 13  
<212> PRT  
<213> ARTIFICIAL SEQUENCE

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106250-05002360

<400> 76

Phe Ala Lys Leu Leu Phe Lys Ala Leu Lys Lys Ala Leu  
1 5 10

<210> 77

<211> 13

<212> PRT

<213> ARTIFICIAL SEQUENCE

<220>

<223> SYNTHETIC SEQUENCE

<220>

<221> MOD\_RES

<222> (13)

<223> AMIDATION

<400> 77

Phe Ala Lys Leu Leu Ala Lys Phe Leu Lys Lys Ala Leu  
1 5 10

<210> 78

<211> 13

<212> PRT

<213> ARTIFICIAL SEQUENCE

<220>

<223> SYNTHETIC SEQUENCE

<220>

<221> MOD\_RES

<222> (13)

<223> AMIDATION

<400> 78

Phe Ala Lys Leu Leu Ala Lys Ala Phe Lys Lys Ala Leu  
1 5 10

<210> 79

<211> 13

<212> PRT

<213> ARTIFICIAL SEQUENCE

<220>

<223> SYNTHETIC SEQUENCE

<220>

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<222> (13)

<223> AMIDATION

<400> 79

Phe Ala Lys Leu Phe Ala Lys Ala Phe Lys Lys Ala Leu

0982053-050901

1 5 10

<210> 80  
 <211> 13  
 <212> PRT  
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<220>  
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<220>  
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 <222> (13)  
 <223> AMIDATION

<400> 80  
 Phe Ala Lys Leu Leu Ala Lys Ala Leu Lys Lys Phe Leu  
 1 5 10

<210> 81  
 <211> 14  
 <212> PRT  
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<220>  
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<220>  
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 <222> (14)  
 <223> AMIDATION

<400> 81  
 Phe Ala Lys Leu Leu Ala Lys Ala Leu Lys Lys Phe Ala Leu  
 1 5 10

<210> 82  
 <211> 14  
 <212> PRT  
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<220>  
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<220>  
 <221> MOD\_RES  
 <222> (14)  
 <223> AMIDATION

<400> 82  
 Phe Ala Lys Leu Leu Ala Lys Leu Ala Lys Lys Phe Ala Leu  
 1 5 10



<223> SYNTHETIC SEQUENCE

<221> MOD RES

 $\langle 222 \rangle \quad (13)$ 

## <223> AMIDATION

Phe Ala Lys Leu Leu Ala Lys Leu Ala Lys Lys Val Leu  
1 5 10

<210> 87

<211> 13

<212> PRT

<213> ARTIFICIAL SEQUENCE

 $\langle 220 \rangle$ 

<223> SYNTHETIC SEQUENCE

<220>

<221> MOD RES

 $\langle 222 \rangle \quad (13)$ 

### <223> AMIDATION

<400> 87

Phe Ala Lys Leu Leu Ala Lys Leu Ala Lys Lys Ile Leu  
1 5 10

<210> 88

<211> 13

<212> PRT

<213> ARTIFICIAL SEQUENCE

<220>

<223> SYNTHETIC SEQUENCE

 $\langle 220 \rangle$ 

<221> MOD RES

 $\langle 222 \rangle \quad (1\bar{3})$ 

<223> AMIDATION

<400> 88

Phe Ala Lys Leu Leu Ala Lys Leu Ala Lys Lys Glu Leu  
1 5 10

<210> 89

<211> 13

<212> PRT

<213> ARTIFICIAL SEQUENCE

<220>

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<221> MOD RES

## <223> AMIDATION

Phe Ala Lys Leu Leu Ala Lys Leu Ala Lys Lys Ser Leu  
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<211> 5

<213> ARTIFICIAL SEQUENCE

<223> SYNTHETIC SEQUENCE

<221> MOD RES

### <223> AMIDATION

Phe Ala Lys Leu Ala  
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<211> 5

<213> ARTIFICIAL SEQUENCE

<223> SYNTHETIC SEQUENCE

<221> MOD RES

## <223> AMIDATION

Phe Ala Lys Leu Phe  
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<211> 5

<213> ARTIFICIAL SEQUENCE

<223> SYNTHETIC SEQUENCE

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<400> 95

Phe Ala Phe Gly Lys Gly Ile Gly Lys Val Gly Lys Lys Leu Leu  
1 5 10 15

<210> 96

<211> 22

<212> PRT

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<220>

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<222> (22)

<223> AMIDATION

<400> 96

Phe Ala Lys Ala Ile Ala Lys Ile Ala Phe Gly Lys Gly Ile Gly Lys  
1 5 10 15

Val Gly Lys Lys Leu Leu  
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<210> 97

<211> 22

<212> PRT

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<222> (22)

<223> AMIDATION

<400> 97

Phe Ala Lys Leu Trp Ala Lys Leu Ala Phe Gly Lys Gly Ile Gly Lys  
1 5 10 15

Val Gly Lys Lys Leu Leu  
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<210> 98

<211> 12

<212> PRT

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<222> (12)  
<223> AMIDATION
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<400> 105  
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<400> 107  
Phe Ala Leu Lys Ala Leu Lys Lys  
1 5

Variable	Mean	SD	Min	Max
Age (years)	45.2	12.5	25	65
Gender (Male/Female)	50/50			
Education (years)	12.8	2.1	8	16
Income (USD/month)	1,200	300	500	2,000
Marital status (Married/Single)	70/30			
Occupation (Professional/Service)	60/40			
Health status (Good/Fair/Poor)	40/30/30			
Smoking status (Smoker/Non-smoker)	20/80			
Alcohol consumption (Yes/No)	10/90			
Exercise frequency (Times/week)	2.5	1.5	0	5
Dietary intake (Calories/day)	2,200	400	1,500	3,000
Sleep duration (Hours/night)	7.5	1.0	6	9
Stress level (Low/Medium/High)	30/40/30			
Family size (Number of children)	1.5	1.0	0	4
Health insurance (Yes/No)	80/20			
Chronic diseases (Hypertension/Diabetes)	10/5			
Medication use (Yes/No)	15/85			
Healthcare utilization (Visits/year)	3.0	2.0	0	10
Healthcare costs (USD/year)	500	200	0	1,000
Healthcare satisfaction (Satisfied/Dissatisfied)	60/40			
Healthcare accessibility (Easy/Difficult)	50/50			
Healthcare quality (Good/Poor)	40/60			
Healthcare equity (Fair/Unfair)	50/50			
Healthcare transparency (Transparent/Not transparent)	60/40			
Healthcare accountability (Accountable/Not accountable)	70/30			
Healthcare responsiveness (Responsive/Not responsive)	80/20			
Healthcare patient-centeredness (Patient-centered/Not patient-centered)	90/10			
Healthcare safety (Safe/Not safe)	95/5			
Healthcare effectiveness (Effective/Not effective)	85/15			
Healthcare efficiency (Efficient/Not efficient)	75/25			
Healthcare equity (Equitable/Not equitable)	65/35			
Healthcare transparency (Transparent/Not transparent)	55/45			
Healthcare accountability (Accountable/Not accountable)	45/55			
Healthcare responsiveness (Responsive/Not responsive)	35/65			
Healthcare patient-centeredness (Patient-centered/Not patient-centered)	25/75			
Healthcare safety (Safe/Not safe)	15/85			
Healthcare effectiveness (Effective/Not effective)	10/90			
Healthcare efficiency (Efficient/Not efficient)	5/95			
Healthcare equity (Equitable/Not equitable)	0/100			
Healthcare transparency (Transparent/Not transparent)	0/100			
Healthcare accountability (Accountable/Not accountable)	0/100			
Healthcare responsiveness (Responsive/Not responsive)	0/100			
Healthcare patient-centeredness (Patient-centered/Not patient-centered)	0/100			
Healthcare safety (Safe/Not safe)	0/100			
Healthcare effectiveness (Effective/Not effective)	0/100			
Healthcare efficiency (Efficient/Not efficient)	0/100			
Healthcare equity (Equitable/Not equitable)	0/100			
Healthcare transparency (Transparent/Not transparent)	0/100			
Healthcare accountability (Accountable/Not accountable)	0/100			
Healthcare responsiveness (Responsive/Not responsive)	0/100			
Healthcare patient-centeredness (Patient-centered/Not patient-centered)	0/100			
Healthcare safety (Safe/Not safe)	0/100			
Healthcare effectiveness (Effective/Not effective)	0/100			
Healthcare efficiency (Efficient/Not efficient)	0/100			
Healthcare equity (Equitable/Not equitable)	0/100			
Healthcare transparency (Transparent/Not transparent)	0/100			
Healthcare accountability (Accountable/Not accountable)	0/100			
Healthcare responsiveness (Responsive/Not responsive)	0/100			
Healthcare patient-centeredness (Patient-centered/Not patient-centered)	0/100			
Healthcare safety (Safe/Not safe)	0/100			
Healthcare effectiveness (Effective/Not effective)	0/100			
Healthcare efficiency (Efficient/Not efficient)	0/100			
Healthcare equity (Equitable/Not equitable)	0/100			
Healthcare transparency (Transparent/Not transparent)	0/100			
Healthcare accountability (Accountable/Not accountable)	0/100			
Healthcare responsiveness (Responsive/Not responsive)	0/100			
Healthcare patient-centeredness (Patient-centered/Not patient-centered)	0/100			
Healthcare safety (Safe/Not safe)	0/100			
Healthcare effectiveness (Effective/Not effective)	0/100			
Healthcare efficiency (Efficient/Not efficient)	0/100			
Healthcare equity (Equitable/Not equitable)	0/100			
Healthcare transparency (Transparent/Not transparent)	0/100			
Healthcare accountability (Accountable/Not accountable)	0/100			
Healthcare responsiveness (Responsive/Not responsive)	0/100			
Healthcare patient-centeredness (Patient-centered/Not patient-centered)	0/100			
Healthcare safety (Safe/Not safe)	0/100			
Healthcare effectiveness (Effective/Not effective)	0/100			
Healthcare efficiency (Efficient/Not efficient)	0/100			
Healthcare equity (Equitable/Not equitable)	0/100			
Healthcare transparency (Transparent/Not transparent)	0/100			
Healthcare accountability (Accountable/Not accountable)	0/100			
Healthcare responsiveness (Responsive/Not responsive)	0/100			
Healthcare patient-centeredness (Patient-centered/Not patient-centered)	0/100			
Healthcare safety (Safe/Not safe)	0/100			

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1 5 10







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1 5 10

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Leu

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Lys Leu Ala Lys Lys Leu Ala Lys Leu Ala Lys Leu Ala Lys Ala Leu  
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<211> 16

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<223> SYNTHETIC SEQUENCE

<400> 121

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Lys Trp Lys Lys Leu Ala Lys Lys Trp  
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<222> (11)  
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 Lys Trp Lys Lys Leu  
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<400> 135  
 Lys Phe Lys Lys Leu Ala Lys Lys Phe  
 1 5

<210> 136







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<400> 142  
Phe Ala Leu Ala Leu Lys Leu Lys Lys Leu  
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<400> 145  
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1 5

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1 5 10 15  
Val Ala Glu Ile Met Asn Ser  
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<400> 147  
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1 5 10 15  
Ala Lys Phe Ala Phe Ala Phe  
20

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<400> 148  
Lys Lys Val Val Phe Lys Val Lys Phe Lys  
1 5 10

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<400> 149  
Phe Lys Val Lys Phe Lys Val Lys Val Lys  
1 5 10

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Leu Pro Lys Trp Lys Val Phe Lys Lys Ile Glu Lys Val Gly Arg Asn  
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Ile Arg Asn Gly Ile Val Lys Ala Gly Pro Ala Ile Ala Val Leu Gly  
20 25 30

Glu Ala Lys Ala Leu Gly  
35

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Ala Lys Leu Ala Lys Lys Leu  
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<400> 153  
Val Ala Lys Phe Leu Ala Lys Phe Leu Lys Lys Ala Leu  
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Ala Lys Phe Ala Phe Ala Phe  
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Leu Ala Leu

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<400> 156  
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1 5 10 15

<210> 157

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<400> 157  
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1 5 10

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Lys Ala Leu Lys Lys Ala Leu  
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Lys Ala Leu Lys Lys Ala Leu  
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Lys Leu Ala Lys Lys Ala Leu  
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1 5 10 15

Ala Lys Leu Ala Leu Ala Leu  
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<210> 163

<211> 30

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